

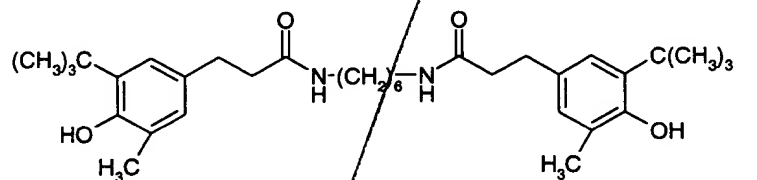
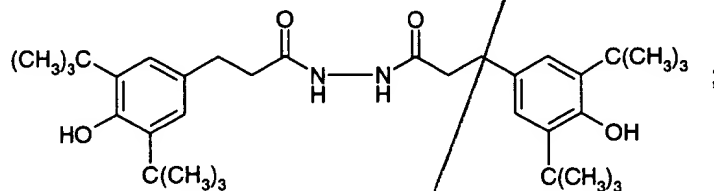
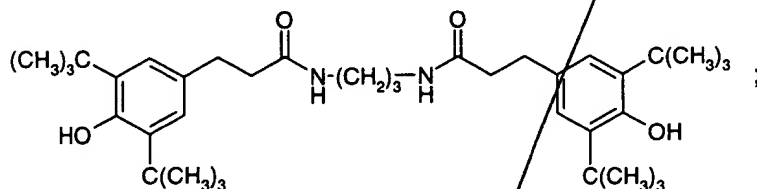
What is claimed is

1. A process for the preparation of a low-dust stabiliser, which comprises extruding a sub-cooled melt consisting essentially of an organic compound having a molecular weight of 200 to 1500 g/mol, or the plastic composition consisting of the mixture of the subcooled melt and a further component, which is selected from compounds of the subcooled melt in crystalline form and other conventional additives.
2. A process according to claim 1, wherein the molecular weight of each main component of the subcooled melt is from 300-1200 g/mol.
3. A process according to claim 1, wherein each main component of the subcooled melt by itself has a glass transition temperature in the range from 10-120°C.
4. A process according to claim 1, wherein the subcooled melt component in the plastic composition is from 5 to 100 % by weight.
5. Granules obtained by a process according to claim 1.
6. A solid single-phase amorphous stabiliser, which comprises 2 or more compounds having a molecular weight in the range from 300-1000 g/mol.
7. An amorphous solid or subcooled melt of
2,2'-methylenebis(4-[1,1,3,3-tetramethylbutyl]-6-benzotriazol-2-yl-phenol);
bis(2-methyl-4-hydroxy-5-tert-butylphenyl)sulfide;
N,N'-bis(3-[3',5'-di-tert-butyl-4'-hydroxyphenyl]propionyl)hexamethylenediamine;
1,3,5-trimethyl-2,4,6-tris(3',5'-di-tert-butyl-4'-hydroxybenzyl)benzene;
1,3,5-tris(3,5-di-tert-butyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione;
1,3,5-tris(4-tert-butyl-3-hydroxy-2,6-dimethylbenzyl)1,3,5-triazine-2,4,6-(1H,3H,5H)-trione;
di(1,2,2,6,6-pentamethylpiperidin-4-yl)-2-(3,5-di-tert-butyl-4-hydroxybenzyl)-2-n-butyl-malonate;
2-(2'-hydroxy-3',5'-bis(1,1-dimethylbenzyl)phenyl)benzotriazole;
2-(2'-hydroxy-3',5'-di-tert-butylphenyl)benzotriazole;
2-(2-hydroxy-3,5-di-tert-butylphenyl)-5-chlorobenzotriazole;

TOP SECRET

Sub
D2

an isomeric mixture of 5,7-di-tert-butyl-3-(3,4-dimethylphenyl)-(9d)-2(3H)-benzofuranone and 5,7-di-tert-butyl-3-(2,3-dimethylphenyl)-(9d)-2(3H)-benzofuranone;
or of a compound of formula



8. A mixture comprising a subcooled melt or amorphous solid of a compound according to claim 7 in an amount from 5 to 100 % by weight.

9. A process for the preparation of a subcooled melt according to claim 7 or of a mixture comprising a subcooled melt according to claim 8, which comprises rapidly cooling the melt to a temperature from the regular melting point to the glass transition temperature of the homogeneous phase.

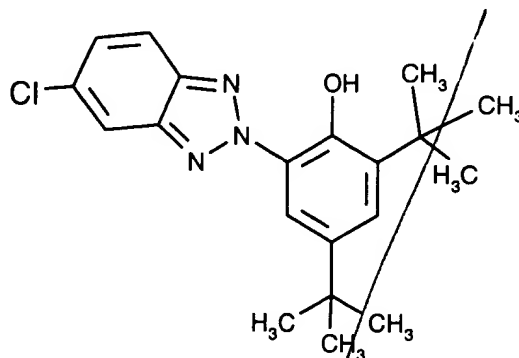
10. A process for the preparation of the amorphous solid according to claim 7 or of a mixture comprising an amorphous solid according to claim 8, which comprises chilling the melt or subcooled melt to a temperature below the glass transition temperature.

11. Crystalline β -modification of the compound 14

Subi
D²

SUR
B¹

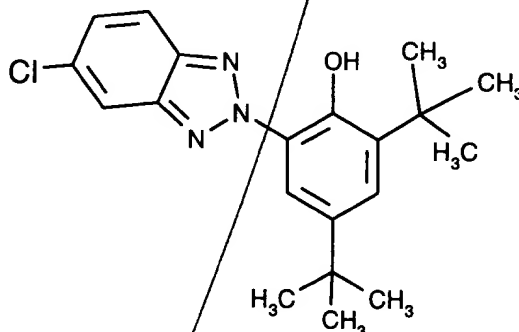
Subi
D²



(14)

characterised by the interplanar spacings are $9.4 \cdot 10^{-10}$ m, $4.69 \cdot 10^{-10}$ m, $3.94 \cdot 10^{-10}$ m and $3.79 \cdot 10^{-10}$ m.

12. A mixture consisting of different modifications of compound 14 of formula



which comprises from 40 up to 100 % by weight of β -crystalline form according to claim 11.

13. A process for the preparation of the β -crystalline form of compound 14 according to claim 11, which comprises crystallising, recrystallising or tempering compound 14 in the temperature range from 95°C to the melting point and then cooling it rapidly.

14. A process for colour-stabilising amorphous pentaerythritol-tetrakis(3-[3',5'-di-tert-butyl-4'-hydroxyphenyl]propionate), which comprises admixing a stabiliser from the class consisting of the organic phosphites, phosphonites and/or benzofuran-2-ones to a melt consisting of pentaerythritol-tetrakis(3-[3',5'-di-tert-butyl-4'-hydroxyphenyl]propionate) and solidifying the mixture so obtained.

Sub
D2

SU15
BL

Sub D2

add
B5

15. Colour-stabilised amorphous pentaerythritol-tetrakis(3-[3',5'-di-tert-butyl-4'-hydroxyphenyl]propionate) containing a sufficient stabilising amount of a stabiliser from the class consisting of the organic phosphites, phosphonites and/or benzofuran-2-ones.
16. A stabiliser composition, which comprises
 - a) pentaerythritol-tetrakis(3-[3',5'-di-tert-butyl-4'-hydroxyphenyl]propionate), and
 - b) a compound of the benzofuran-2-one type.
17. A composition, which comprises
 - A) an organic material susceptible to oxidative, thermal or/and actinic degradation or build-up, and
 - B) the amorphous form of a compound according to claim 7, the β -crystalline form of compound 14 according to claim 11 and/or the stabiliser composition according to claim 16 as stabiliser.
18. A process for stabilising organic material against oxidative, thermal or actinic degradation or build-up, which comprises adding to the material the amorphous form of a compound according to claim 7, the β -crystalline form of compound 14 according to claim 11 and/or the stabiliser composition according to claim 16 as stabiliser.
19. A process according to claim 18, wherein 0.01 to 15 parts by weight of the stabiliser are added to 100 parts by weight of organic material to be stabilised.
20. A process according to claim 18, wherein the organic material is a synthetic thermoplastic polymer.
21. A process according to claim 18, wherein a customary additive is added as further component.